

JUL 14 2009

Amendment and Response

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Serial No.: 10/564,102

Confirmation No.: 7195

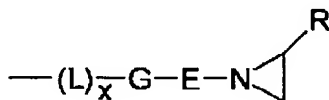
Filed: June 19, 2006

For: DENTAL COMPOSITION COMPRISING ETHYLENE IMINE COMPOUNDS AND NON-REACTIVE ACCELERATORS

Amendments to the Claims

This listing of claims replaces all prior versions, and listings, of claims in the above-identified application:

1. (Currently Amended) A dental composition comprising:
 - (a) an N-alkyl aziridine polyether,
 - (b) a compound having an SO₂-NH group, wherein the compound is selected from ~~aryl sulfonic acid amides and alkyl sulfonic acid amides~~, the group consisting of N-alkyl or N-aryl substituted aryl sulfonic acid amides, and N-alkyl or N-aryl substituted alkyl sulfonic acid amides, and
 - (c) an initiator.
2. (Previously Presented) The composition of claim 1, further comprising at least one additive selected from the group consisting of modifiers, fillers, dyes, pigments, thixotropic agents, flow improvers, polymeric thickeners, surfactants, odorous substances, diluting agents and flavouring agents.
3. (Previously Presented) The composition according to claim 1, wherein component (a) comprises a structural element represented by the following formula:



wherein

R is a moiety selected from the group consisting of H, C₁-C₁₂ alkyl, C₂-C₁₂ alkenyl, C₂-C₁₂ alkynyl, C₇-C₁₅ alkylaryl, C₇-C₁₅ arylalkyl, and C₃-C₁₂ cycloalkyl, wherein any of the hydrogen atoms of the moiety may be replaced by Cl or F and up to five carbon atoms of the moiety may be replaced by atoms or group of atoms selected from O, CO, N, and S,

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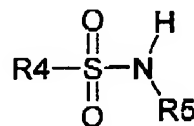
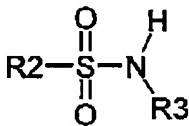
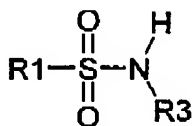
E is selected from the group consisting of $C_1 - C_{18}$ branched or unbranched hydrocarbon chains wherein up to five carbon atoms of the chain may be replaced by an atom or group of atoms selected from O, CO, N, and S,

G is a group selected from $C(O)O$, $C(O)NR$, $C(O)$, $C(O)C(O)$, $C(O)(CH_2)_mC(O)$ where m is 1 to 10, $C(S)NR$, and CH_2 ,

L is O, S, or NR and

x is 0 or 1.

4. (Previously Presented) The composition according to claim 1, wherein component (b) is present in an amount of about 0.01% by weight to about 20.00 % by weight.
5. (Cancelled)
6. (Previously Presented) The composition of claim 1, wherein component (b) is a compound represented by at least one of the following formulas:



wherein

R1 is a moiety selected from the group consisting of C_1 - C_{22} alkyl, C_2 - C_{22} alkenyl, C_2 - C_{22} alkynyl, C_7 - C_{22} arylalkyl and C_3 - C_{22} cycloalkyl, wherein one or more hydrogen atoms of the moiety may be replaced by Cl or F and/or up to five carbon atoms may be replaced by atoms or group of atoms selected from O, CO, N, and S,

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R2 is a moiety selected from the group consisting C₆-C₁₈ aryl, C₇-C₂₂ alkylaryl, C₂-C₂₂ cycloalkylaryl, C₇-C₂₂ alkenylaryl and C₇-C₂₂ alkynylaryl, wherein one or more hydrogen atoms of the moiety may be replaced by Cl or F and up to five carbon atoms may be replaced by atoms or group of atoms selected from O, CO, N, and S,

R3 is H, R1 or R2,

R4 is R1 or R2, and

and R5 is the chemical linkage to a polymer.

7. (Previously Presented) The composition of claim 1, wherein the molecular weight of component (b) is in the range of about 90 to about 2000 g·mol⁻¹.
8. (Currently Amended) The composition of claim 1, wherein component (b) is selected from the group consisting of benzene sulfonic acid N-butyl amide, [[or]] p-toluene sulfonic acid N-ethyl amide, o-toluene sulfonic acid N-ethyl amide, benzene sulfonic acid amide and a mixture of o-/p- toluene sulfonic acid N-ethyl amide.
9. (Previously Presented) The composition of claim 1, wherein initiator (c) is selected from the group consisting of protonating or alkylating agents or wherein the initiator (c) generates protons or reactive alkylating agents in a chemical reaction.
10. (Previously Presented) The composition of claim 1 having a working time at 23 °C of equal or less than 3:30 min according to DIN EN ISO 4823:2000 or an oral setting time of equal or less than 3:30 min.
11. (Currently Amended) A kit comprising a base part and a catalyst part, wherein the base part comprises an N-alkyl aziridine polyether, the catalyst part comprises an initiator, and

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- wherein a compound having an SO₂-NH group selected from aryl sulfonic acid amides and alkyl sulfonic acid amides is present either in the base part or the catalyst part or in the base part and the catalyst part, wherein the compound is selected from the group consisting of N-alkyl or N-aryl substituted aryl sulfonic acid amides and N-alkyl or N-aryl substituted alkyl sulfonic acid amides.
12. (Currently Amended) A kit comprising a base part and a catalyst part, wherein the base part comprises an N-alkyl aziridine polyether, the catalyst part comprises an initiator, and wherein a compound having an SO₂-NH group selected from aryl sulfonic acid amides and alkyl sulfonic acid amides is present in a further part and is not present in the catalyst part or in the base part, wherein the compound is selected from the group consisting of N-alkyl or N-aryl substituted aryl sulfonic acid amides and N-alkyl or N-aryl substituted alkyl sulfonic acid amides.
13. (Currently Amended) A method of producing a dental composition comprising the step of mixing
- (a) an N-alkyl aziridine polyether,
 - (b) a compound having an SO₂-NH group, wherein the compound is selected from aryl sulfonic acid amides and/or alkyl sulfonic acid amides the group consisting of N-alkyl or N-aryl substituted aryl sulfonic acid amides and N-alkyl or N-aryl substituted alkyl sulfonic acid amides, and
 - (c) an initiator.
14. (Currently Amended) A method for enhancing the setting speed of a dental composition, comprising a polyether, the method comprising the step of incorporating an aryl sulfonic acid amide or alkyl sulfonic acid amide into the composition a compound having an SO₂-NH group, wherein the compound is selected from the group consisting of N-alkyl or N-

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aryl substituted aryl sulfonic acid amides and N-alkyl or N-aryl substituted alkyl sulfonic acid amides.

15. (Previously Presented) The dental composition of claim 1, wherein the composition is a dental impression material.